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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,995	01/16/2004	Yong-sok Yang	1349.1243	3232

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EXAMINER

GARCIA JR, RENE

ART UNIT PAPER NUMBER

2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/757,995	Applicant(s) YANG, YONG-SOK	
	Examiner Rene Garcia, Jr.	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 12-19, 21-24, 27-30, 32, 33 and 36-49 is/are pending in the application.
- 4a) Of the above claim(s) 1-8, 10, 11, 20, 25, 26, 31, 34, 35, 50 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 12-14, 17-19, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 15, 16, 23, 24, 27-30, 32, 33 and 36-49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 9, 12-19, 21-24, 27-30, 32, 33 & 36-49 (claims 9, 12, 19, 22, 23, 27, 29, 30 & 33 are generic) in the reply filed on 17 November 2006 is acknowledged.
2. Claims 1-8, 10, 11, 20, 25, 26, 31, 34, 35, 50 & 51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 17 November 2006.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show angle "S" (see ¶0077 – with regards to figures 10A & 10B) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet

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submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 22 does not contain any new limitations not presented in claim 19, since amended claim 19 now includes limitations present in claim 22.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 9, 12, 19, 21 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Shinada et al. (US 6,502,917).

Shinada et al. discloses the following claimed limitations:

*regarding claims 9, 19 & 22, carriage/3/ (fig. 1; col. 3, lines 21-29) for an ink cartridge/40/ of an image forming apparatus/**ink-jet printing apparatus**/ comprising:

*carriage body/**holder**, 4/ having a mounting portion, in which the ink cartridge/40/ having a latching portion/**overhang**, 46/ (fig. 8; col. 3, lines 45-52) is accommodated

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***latch/lever, 11/** rotatably disposed at the carriage body/**4/** to close the mounting portion by locking, that when unlocking with respect to the carriage body, draws the ink cartridge out of the mounting portion (fig. 8; col. 6, lines 35-41)

***resilient latch member/plate spring, 70/** (fig. 8; col. 8. lines 28-34) to resiliently bias the latch in an opening direction

***locking unit/hook portion, 18 & hook, 16/** (col. 3, lines 45-52) to lock the latch to the carriage body (fig. 2, 3)

*regarding claim 12, wherein the locking unit comprises:

***locking projection/hook, 16/** disposed at a sidewall of the carriage body

***hook member/hook portion, 18/** hinged on the latch and selectively hooked into the locking projection/**16/** (fig. 2, 3; col. 3, lines 45-52)

***release handle** to release the hook member/**18/** from the locking projection/**16/** (fig. 3; to disengage hook/**16/** and hook portion/**18/** it is necessary to push in a right direction the portion of lever/**11/** above hook portion/**18/**)

*further regarding claim 19, carriage body movable on a guide rail (fig. 1; carriage need to traverse medium in a scanning direction and known in art to utilize a rail or rod for such purpose)

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*regarding claim 21, plunger/elastic member, 21/ (fig. 3; col. 3, lines 54-64), wherein the plunger is integrally formed with the latch and the plunger elastically deforms to secure the ink cartridge in a mounted position when the latch closes the opening

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13, 14, 17 & 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinada et al. (US 6,502,917) in view of Miyazawa et al. (US 6,250,750).

Shinada et al. discloses all the claimed limitations except for the following:

*regarding claim 13, sliding unit that limits an opening angle of the latch with respect to the carriage body

*regarding claim 14, sliding unit comprises: a sliding protrusion disposed on the latch; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion

*regarding claim 17, first imaginary line, which is parallel to an upper surface of the latch in a locked position

*second imaginary line, which is parallel to the upper surface of the latch in an opened position

*form an interior angle ranging from about 20° to about 30°

*regarding claim 18, interior angle is approximately 21°

Miyazawa et al. discloses the following:

*regarding claim 13, sliding unit that limits an opening angle of the latch with respect to the carriage body (fig. 12a-c; col. 8, lines 40-56)

*regarding claim 14, sliding unit comprises: a sliding protrusion/**lifter, 115/** disposed on the latch/**cover body, 110/**; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion (fig. 12a; portion where lifter/115/ and cover body/110/ meet [hinge])

*regarding claim 17, first imaginary line, which is parallel to an upper surface of the latch in a locked position

*second imaginary line, which is parallel to the upper surface of the latch in an opened position

*form an interior angle ranging from about 20° to about 30° (as seen in fig. 12a the angle between a closed/first imaginary line/ [locked] position and fully open position/second imaginary line/ of cover body/110/ is 90°; however particular open position has not been defined to regards to an exact position therefore since the range of the angel between closed [locked] and fully open is 0°-90° it can also form an angle of 20°-30°)

*regarding claim 18, interior angle is approximately 21° (same argument as with regards to claim 17)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize sliding unit that limits an opening angle of the latch with respect to the carriage body; sliding unit comprises: a sliding protrusion disposed on the latch; and a sliding hole portion disposed on the carriage body opposite to the sliding protrusion, to accommodate the sliding protrusion; first imaginary line, which is parallel to an upper surface of the latch in a locked position, second imaginary line, which is parallel to the upper surface of the latch in an opened position, form an interior angle ranging from about 20° to about 30° ; and interior angle is approximately 21° as taught by Miyazawa et al. into Shinada et al. for the purpose providing the cover body/latch/ with a defined open/close path that limits how open the cover body/latch/ can be.

Response to Arguments

9. Applicant's arguments with respect to claims 9 & 12 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

10. Claims 15, 16, 23, 24, 27-30, 32, 33 & 36-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The primary reason for indicating allowable subject matter of claims 15 & 16 is the inclusion of the limitations of carriage including first penetrating hole receiving the sliding protrusion at a

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first position when the latch is locked; a second penetrating hole receiving the sliding protrusion at a second position when the latch is opened; and a connection portion connecting the first and the second penetrating holes. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

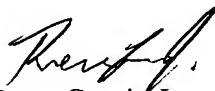
The primary reason for indicating allowable subject matter of claims 23, 24, 27-30, 32, 33 & 36-49 is the inclusion of the limitations of carriage including a locking projection connected to the carriage body; a release handle rotatably connected to the latch; and a hook member rotatably connected to the latch, that engages and disengages the locking projection when the release handle is rotated in a locking direction and an unlocking direction, respectively.. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Communications with the USPTO

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Rene Garcia Jr
02/07


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER